

Table 42 (page 1 of 3). Death rates for chronic lower respiratory diseases, according to sex, race, Hispanic origin, and age: United States, selected years 1980–2000

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1980	1990	1994	1995	1996	1997	1998	Comparability modified		
								1998 ¹	1999 ²	2000 ²
All persons										
All ages, age adjusted	28.3	37.2	40.6	40.5	41.0	41.5	42.0	44.0	45.8	44.3
All ages, crude	24.7	34.9	39.0	39.2	40.0	40.7	41.7	43.7	45.5	44.3
Under 1 year	1.6	1.4	1.4	1.1	1.0	1.3	1.0	1.0	0.9	0.9
1–4 years	0.4	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.3
5–14 years	0.2	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4
15–24 years	0.3	0.5	0.6	0.7	0.7	0.5	0.6	0.6	0.6	0.5
25–34 years	0.5	0.7	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.8
35–44 years	1.6	1.6	1.8	2.0	2.0	2.0	2.0	2.1	2.0	2.1
45–54 years	9.8	9.1	9.0	8.9	8.7	8.4	8.2	8.6	8.7	8.8
55–64 years	42.7	48.9	49.2	47.3	47.0	46.3	44.8	46.9	48.3	44.8
65–74 years	129.1	152.5	163.8	160.6	161.6	165.3	169.1	177.2	179.2	171.5
75–84 years	224.4	321.1	351.9	351.8	358.3	359.6	365.8	383.3	400.4	387.6
85 years and over	274.0	433.3	509.7	527.8	540.9	561.9	569.3	596.5	642.7	640.1
Male										
All ages, age adjusted	49.9	55.5	55.7	55.0	54.2	54.6	54.0	56.6	58.1	54.9
All ages, crude	35.1	40.8	42.3	42.0	42.0	42.7	43.2	45.3	46.8	44.6
Under 1 year	1.9	1.6	1.7	1.4	1.3	1.6	1.2	1.3	*	1.2
1–4 years	0.5	0.5	0.3	0.2	0.4	0.3	0.4	0.4	0.4	0.4
5–14 years	0.2	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.4
15–24 years	0.4	0.5	0.8	0.7	0.7	0.7	0.8	0.8	0.6	0.6
25–34 years	0.6	0.7	0.9	0.9	0.8	1.0	0.9	0.9	0.8	0.9
35–44 years	1.7	1.7	1.8	1.7	1.9	1.9	1.9	2.0	1.8	2.0
45–54 years	12.1	9.4	9.3	9.0	8.9	8.8	8.2	8.6	8.9	9.1
55–64 years	59.9	58.6	55.9	52.9	52.2	50.5	49.6	52.0	53.4	48.7
65–74 years	210.0	204.0	202.0	196.9	192.6	201.3	201.2	210.8	213.2	197.6
75–84 years	437.4	500.0	490.4	482.5	478.8	469.6	471.5	494.0	507.2	480.3
85 years and over	583.4	815.1	874.9	896.2	878.6	902.8	869.8	911.4	959.0	918.3
Female										
All ages, age adjusted	14.9	26.6	31.9	32.2	33.4	33.9	34.8	36.5	38.2	37.9
All ages, crude	15.0	29.2	35.9	36.4	38.0	38.8	40.2	42.1	44.3	44.1
Under 1 year	1.3	1.2	1.1	*	*	*	*	*	*	*
1–4 years	*	*	*	*	*	*	*	*	0.3	0.3
5–14 years	0.3	0.3	0.2	0.2	0.4	0.3	0.3	0.3	0.2	0.3
15–24 years	0.3	0.5	0.5	0.6	0.6	0.4	0.5	0.5	0.5	0.4
25–34 years	0.5	0.7	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.7
35–44 years	1.5	1.5	1.7	2.2	2.1	2.1	2.0	2.1	2.1	2.2
45–54 years	7.7	8.8	8.7	8.8	8.4	8.1	8.2	8.6	8.5	8.4
55–64 years	27.6	40.3	43.1	42.2	42.4	42.6	40.5	42.4	43.6	41.3
65–74 years	67.1	112.3	133.4	131.5	136.7	136.1	143.0	149.8	151.4	150.0
75–84 years	98.7	214.2	265.2	268.8	280.4	287.6	295.8	309.9	328.9	324.9
85 years and over	138.7	286.0	368.8	384.3	406.7	424.5	444.7	466.0	509.0	520.2
White male										
All ages, age adjusted	51.6	56.6	56.9	56.1	55.5	55.9	55.4	58.0	59.6	56.3
All ages, crude	37.9	44.3	46.4	46.1	46.1	47.0	47.7	50.0	51.7	49.3
35–44 years	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.5	1.6
45–54 years	11.4	8.6	8.7	8.3	8.5	8.3	7.6	8.0	8.3	8.5
55–64 years	60.0	58.7	56.7	53.2	52.3	51.0	50.0	52.4	54.0	49.2
65–74 years	218.4	208.1	206.9	201.6	198.4	207.5	208.5	218.5	220.5	204.4
75–84 years	459.8	513.5	504.2	496.3	491.1	481.4	485.5	508.7	519.8	495.2
85 years and over	611.2	847.0	907.7	924.0	917.5	940.1	904.8	948.0	997.5	951.4
Black male										
All ages, age adjusted	34.0	47.6	46.9	47.0	46.1	45.8	45.2	47.4	50.1	46.0
All ages, crude	19.3	25.2	24.9	24.9	24.7	24.6	24.7	25.9	27.2	25.3
35–44 years	5.8	5.3	4.9	4.3	5.2	4.8	5.0	5.2	4.7	4.8
45–54 years	19.7	18.8	16.6	17.3	15.4	14.9	15.1	15.8	16.0	15.7
55–64 years	66.6	67.4	61.0	62.0	63.2	56.6	56.6	59.3	62.0	57.0
65–74 years	142.0	184.5	181.7	175.1	161.6	170.7	164.2	172.0	177.4	169.1
75–84 years	229.8	390.9	374.1	366.5	380.7	374.9	372.1	389.9	423.9	359.6
85 years and over	271.6	498.0	561.7	613.6	579.5	586.5	570.9	598.2	650.9	639.6

See footnotes at end of table.

Table 42 (page 2 of 3). Death rates for chronic lower respiratory diseases, according to sex, race, Hispanic origin, and age: United States, selected years 1980–2000

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1980	1990	1994	1995	1996	1997	1998	Comparability modified 1998 ¹	1999 ²	2000 ²
Deaths per 100,000 resident population										
American Indian or Alaska Native male ³										
All ages, age adjusted	23.0	38.3	32.5	30.9	27.7	38.7	37.8	39.6	34.7	38.7
All ages, crude	8.4	13.8	13.4	13.4	11.9	17.9	17.7	18.5	16.6	18.9
35–44 years	*	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	*	*	*	*	*	*	*
55–64 years	*	*	33.3	39.2	*	54.0	47.5	49.8	40.2	57.3
65–74 years	*	135.7	130.4	129.3	115.9	127.8	139.8	146.5	166.8	120.2
75–84 years	*	363.8	301.8	253.8	229.7	339.9	317.3	332.5	297.0	345.8
85 years and over	*	*	*	*	421.9	488.8	500.2	524.1	340.3	524.5
Asian or Pacific Islander male ⁴										
All ages, age adjusted	21.5	29.8	30.1	33.3	28.2	29.2	25.5	26.7	29.3	28.2
All ages, crude	8.7	11.3	11.5	12.3	12.7	12.9	11.9	12.5	13.8	13.3
35–44 years	*	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	*	*	*	*	*	*	5.0
55–64 years	*	22.1	15.7	16.4	19.2	16.6	17.1	17.9	15.2	9.3
65–74 years	70.6	91.4	85.5	91.7	89.9	86.2	74.7	78.3	87.6	77.3
75–84 years	155.7	258.6	264.2	263.6	294.8	276.3	216.4	226.7	278.2	265.0
85 years and over	472.4	615.2	660.6	847.8	421.7	568.2	553.5	580.0	581.2	602.6
Hispanic male ⁵										
All ages, age adjusted	---	28.6	28.8	29.9	26.8	27.2	26.2	27.5	27.3	23.6
All ages, crude	---	8.4	9.0	9.4	8.7	9.0	9.3	9.7	9.8	8.9
35–44 years	---	*	1.3	1.1	1.1	1.5	1.3	1.4	1.5	1.0
45–54 years	---	4.1	4.6	3.9	4.0	3.5	3.7	3.9	3.7	3.5
55–64 years	---	17.2	18.2	18.8	18.8	17.6	17.7	18.5	17.3	17.8
65–74 years	---	81.0	80.3	78.8	68.4	77.2	73.4	76.9	76.8	67.3
75–84 years	---	252.4	253.5	273.8	240.3	220.2	231.7	242.8	229.4	207.4
85 years and over	---	613.9	616.2	634.5	579.5	634.3	541.7	567.6	610.7	481.3
White, non-Hispanic male ⁵										
All ages, age adjusted	---	57.9	57.7	56.9	56.6	57.2	56.8	59.5	61.3	58.1
All ages, crude	---	48.5	50.7	50.4	50.9	52.2	52.9	55.4	57.6	55.3
35–44 years	---	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.5	1.6
45–54 years	---	9.0	8.9	8.5	8.7	8.6	7.9	8.3	8.6	8.9
55–64 years	---	61.3	58.8	55.2	54.1	53.3	52.3	54.8	56.6	51.4
65–74 years	---	213.4	211.5	206.5	204.0	214.2	215.9	226.2	228.9	212.8
75–84 years	---	523.7	510.3	501.9	499.5	491.0	495.8	519.5	532.6	508.9
85 years and over	---	860.6	908.6	924.5	928.0	951.1	920.4	964.4	1,014.3	975.6
White female										
All ages, age adjusted	15.5	27.8	33.4	33.6	34.9	35.5	36.5	38.2	40.2	40.0
All ages, crude	16.4	32.8	40.6	41.2	43.0	44.1	45.7	47.9	50.5	50.4
35–44 years	1.3	1.2	1.3	1.7	1.7	1.7	1.6	1.7	1.8	1.8
45–54 years	7.6	8.3	8.3	8.4	8.0	7.8	7.7	8.1	8.2	8.0
55–64 years	28.7	41.9	45.2	44.3	44.6	44.8	42.7	44.7	46.1	43.5
65–74 years	71.0	118.8	141.8	139.8	145.3	145.3	153.0	160.3	162.2	161.8
75–84 years	104.0	226.3	280.1	282.8	296.4	304.2	312.9	327.9	347.3	344.4
85 years and over	144.2	298.4	384.9	402.0	423.6	445.0	466.6	488.9	535.1	547.0
Black female										
All ages, age adjusted	9.1	16.6	20.1	20.5	21.8	21.1	22.3	23.4	23.9	23.1
All ages, crude	6.8	12.6	15.4	15.8	17.0	16.5	17.5	18.3	18.7	18.2
35–44 years	3.4	3.8	5.1	5.4	5.0	5.0	5.3	5.6	4.6	4.8
45–54 years	9.3	14.0	13.5	12.9	13.2	12.2	14.2	14.9	12.8	13.5
55–64 years	20.8	33.4	35.8	34.7	34.8	35.8	33.8	35.4	34.7	34.9
65–74 years	32.7	64.7	79.2	78.3	84.3	81.4	84.8	88.9	88.3	81.9
75–84 years	41.1	96.0	122.1	136.6	137.6	136.9	148.9	156.0	174.0	165.9
85 years and over	63.2	133.0	195.0	191.4	236.5	220.9	231.1	242.1	262.9	264.1

See footnotes at end of table.

Table 42 (page 3 of 3). Death rates for chronic lower respiratory diseases, according to sex, race, Hispanic origin, and age: United States, selected years 1980–2000

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1980	1990	1994	1995	1996	1997	1998	Comparability modified									
								1998 ¹	1999 ²	2000 ²							
Deaths per 100,000 resident population																	
American Indian or Alaska Native female ³																	
All ages, age adjusted	7.7	16.8	20.1	20.8	22.2	19.3	21.7	22.7	27.3	24.9							
All ages, crude	3.8	8.7	11.5	12.5	13.4	12.2	13.6	14.3	17.3	16.3							
35–44 years	*	*	*	*	*	*	*	*	*	*							
45–54 years	*	*	*	*	*	*	*	*	*	*							
55–64 years	*	*	34.0	40.6	32.6	35.7	31.6	33.1	44.6	37.1							
65–74 years	*	56.4	73.8	77.8	78.7	88.1	118.2	123.8	110.5	145.3							
75–84 years	*	116.7	189.7	168.9	192.9	137.5	165.8	173.7	259.2	161.9							
85 years and over	*	*	*	*	265.8	171.0	162.3	170.1	194.0	236.4							
Asian or Pacific Islander female ⁴																	
All ages, age adjusted	5.8	11.0	11.8	13.2	11.3	12.6	11.0	11.5	12.0	11.5							
All ages, crude	2.6	5.2	5.8	6.5	6.5	7.2	6.4	6.7	7.2	7.1							
35–44 years	*	*	*	*	*	*	*	*	*	*							
45–54 years	*	*	*	3.6	*	*	*	*	*	*							
55–64 years	*	15.2	9.4	10.0	11.1	9.2	6.7	7.0	8.1	6.6							
65–74 years	*	26.5	29.4	29.8	32.7	32.2	28.5	29.9	41.2	30.5							
75–84 years	*	80.6	105.5	120.1	81.1	117.7	92.4	96.8	95.7	91.1							
85 years and over	*	232.5	238.0	272.6	240.9	242.3	252.3	264.4	246.5	276.3							
Hispanic female ⁵																	
All ages, age adjusted	---	13.4	14.7	15.8	16.1	14.9	13.7	14.4	15.3	13.8							
All ages, crude	---	6.3	7.3	7.9	8.3	7.8	7.4	7.8	8.4	7.7							
35–44 years	---	*	1.3	1.5	1.3	1.1	1.9	2.0	1.8	1.3							
45–54 years	---	4.9	4.1	4.6	4.1	4.4	3.2	3.4	4.2	3.3							
55–64 years	---	14.4	12.1	12.5	13.0	11.7	11.6	12.2	11.5	10.3							
65–74 years	---	36.6	41.2	41.4	40.9	38.6	38.3	40.1	44.8	35.6							
75–84 years	---	101.1	114.5	116.7	134.1	119.3	116.6	122.2	126.2	118.7							
85 years and over	---	269.0	308.4	367.2	342.8	322.6	261.1	273.6	299.3	289.8							
White, non-Hispanic female ⁵																	
All ages, age adjusted	---	28.5	34.1	34.4	35.8	36.5	37.7	39.5	41.5	41.5							
All ages, crude	---	35.7	44.4	45.0	47.2	48.6	50.7	53.1	56.3	56.5							
35–44 years	---	1.2	1.3	1.7	1.7	1.8	1.5	1.6	1.8	1.9							
45–54 years	---	8.5	8.5	8.6	8.2	8.1	8.0	8.4	8.6	8.4							
55–64 years	---	43.7	47.3	46.6	46.8	47.3	45.1	47.3	48.9	46.2							
65–74 years	---	122.8	146.2	144.0	150.4	151.2	160.0	167.6	169.8	170.5							
75–84 years	---	231.9	285.6	288.4	302.5	310.9	320.9	336.2	356.6	354.9							
85 years and over	---	302.1	383.6	401.2	426.8	447.9	473.7	496.3	544.1	557.6							

* Based on fewer than 20 deaths.

--- Data not available.

¹Calculated by multiplying the 1998 rate by its comparability ratio to adjust for differences between ICD-9 and ICD-10. See Appendix II, Comparability ratio and table VI.

²Starting with 1999 data, cause of death is coded according to ICD-10. To estimate change between 1998 and 1999, compare the 1999 rate with the comparability-modified rate for 1998. See Appendix II, Comparability ratio and tables V and VI.

³Interpretation of trends should take into account that population estimates for American Indians increased by 45 percent between 1980 and 1990, partly due to better enumeration techniques in the 1990 decennial census and to the increased tendency for people to identify themselves as American Indian in 1990.

⁴Interpretation of trends should take into account that the Asian population in the United States more than doubled between 1980 and 1990, primarily due to immigration.

⁵Excludes data from States lacking an Hispanic-origin item on their death certificates. See Appendix I, National Vital Statistics System.

NOTES: Age-adjusted rates are calculated using the year 2000 standard population starting with *Health, United States, 2001*. See Appendix II, Age adjustment. For data years shown, code numbers for cause of death are based on the then current revision of the *International Classification of Diseases* (ICD). See Appendix II, tables IV and V. Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race. Bias in death rates results from inconsistent race identification between the death certificate (source of data for numerator of death rates) and data from the Census Bureau (denominator); and from undercounts of some population groups in the census. The net effects of misclassification and under coverage result in death rates estimated to be overstated by 1 percent for the white population and 5 percent for the black population; and death rates estimated to be understated by 21 percent for American Indians, 11 percent for Asians, and 2 percent for Hispanics (Rosenberg HM, Maurer JD, Sorlie PD, Johnson NJ, et al. Quality of death rates by race and Hispanic origin: A summary of current research, 1999. National Center for Health Statistics. *Vital Health Stat* 2(128). 1999). Data for additional years are available (see Appendix III).

SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System; *Vital statistics of the United States, vol II, mortality, part A*, for data years 1980–93. Public Health Service. Washington: U.S. Government Printing Office; for 1994–99, data for all persons, white, and black are available on the NCHS Web site at www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from table 1 and unpublished Hispanic population estimates prepared by the Housing and Household Economic Statistics Division, U.S. Bureau of the Census for 1985–96. Minino AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: Final data for 2000. National vital statistics reports. vol 50 no 15. Hyattsville, Maryland: National Center for Health Statistics. 2002.